**TOPIC: GDM AMONG PREGNANT WOMEN WITH AND WITHOUT PCOS.**

**AIM:**

To evaluate the risk of GDM in pregnant women with PCOS and to evaluate other risk associated with PCOS pregnant women.

**MATERIALS & METHODS:**

1. **Study group**:

Pregnant women of age group 20 -35 years with PCOS presented at our institution obstetrics & Gynaecology department are selected on the basis of ROTTERDAM criteria. They are subjected to undergone OGCT in every trimester and diagnosed as GDM according to DIPSI criteria. These PCOS pregnant women are compared with normal pregnant women. These patients are followed from their first visit till 38 weeks. Patients who are diagnosed as GDM are started on meal plan or insulin according to their blood glucose values. Fetal surveillance is done in every visit.

2. **Study design**: Case control study

3. **Methods**:

75 grams glucose mixed with 300 ml of water is given to the patient and two ml of venous blood will be withdrawn after a period of two hours for blood sugar irrespective of the last meal or fasting status.2 hour postprandial blood glucose ≥ 140 mg/dl is cut off for GDM. OGCT is repeated in second and third trimester if first trimester reading is < 140. Patients who have OGCT value > 140 are labelled as GDM patients and they are treated accordingly.

**RESULTS:**

198 (PCOS= 99, non- pcos= 99) women are considered eligible for the study.2 were excluded from each group as they have not reported for regular follow up.9 %(9/99) of normal pregnant women and 19 % (19/99) of PCOS pregnant women developed GDM .Thus PCOS pregnant women had twofold increased risk of developing GDM.10 % (10/99) PCOS women developed hypothyroidism and 14 % (14/99) developed pre-eclampsia in addition to GDM. Recurrent GDM is also more in PCOS pregnant women.59% of PCOS women had infertility. Family history of diabetes mellitus and hypertension also plays a significant role.

**CONCLUSION:**

The risk of GDM, pre-eclampsia and hypothyroidism are more in PCOS pregnant women compared to normal pregnant women. Thus PCOS itself a significant risk factor for dvelopment of GDM.

**Key words:** Gestational diabetes mellitus, Polycystic ovarian syndrome, Insulin resistance, oral glucose challenge test.